

Correspondence

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TO THE EDITOR, *Genitourinary Medicine*

Monoclonal antibodies in identifying *Neisseria gonorrhoeae*: cautionary note

Sir,

Many bacteriology laboratories identify isolates of *Neisseria gonorrhoeae* by the rapid carbohydrate utilisation test¹ and the Pharmacia Phadebact monoclonal GC test (Blomquist *C et al*, unpublished observation). The latter test recognises the serogroups W1 and WII/WIII, which have epidemiological and clinical importance.

Since June 1985 we have examined 1509 consecutive isolates of *N gonorrhoeae*. Fifteen (nine from men and six from women) did not react with the Pharmacia monoclonal reagents. The first such isolate was noted in April 1986. These isolates were subjected to serovar analysis using two different sets of monoclonal coagglutination reagents, Genetic Systems (GS) and Pharmacia (Ph).² All 15 strains gave the same serological pattern, which corresponded to the serovar combination Bj/Bro (GS/Ph). In both analyses the upper case letter B corresponded to groups WII/WIII and the lower case letters represented positive reactions with the corresponding coagglutination reagents. Bj/Bro isolates are unusual in that they do not react with the Pharmacia monoclonal reagents; this serovar has been linked epidemiologically with Singapore.³

Contact tracing has shown links between eight of the patients. There was no obvious connection between the remaining seven patients, but all reported casual sexual contacts in the Glasgow area. There may therefore be further, as yet undetected, isolates with this serovar combination in this area. The index case has not been identified.

The manufacturers claim that the Phadebact monoclonal GC test identifies 99.7% of all isolates of *N gonorrhoeae*. In this study, 1% (15/1509) isolates did not react in the test. From our findings, we advocate caution in using only this test to confirm the identity of an isolate of *N gonorrhoeae*. Furthermore, we conclude from this small study that serovar analysis is a valuable and potentially useful tool in the microepidemiology of gonococcal infection. To date, however, the diversity and distribution of gonococcal serovar patterns has been established only in Edinburgh, where the occurrence of Bj/Bro isolates is rare.⁴

We thank Dr Hugh Young, Department of Bacteriology, University of Edinburgh for performing the serovar analysis.

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References

- 1 Young H, Paterson IC, McDonald DR. Rapid carbohydrate utilisation test for the identification of *Neisseria gonorrhoeae*. *British Journal of Venereal Diseases* 1976;52:172-5.
- 2 Bygdeman SM, Gillenius E-C, Sandstrom EG. Comparison of two different sets of monoclonal antibodies for the serological classification of *Neisseria gonorrhoeae*. In: Schoolnik GK, Brooks GF, Falkow S, *et al*, eds. *The pathogenic neisseriae*. Washington DC: American Society for Microbiology, 1985:31-6.
- 3 Bygdeman SM. Polyclonal and monoclonal antibodies applied to the epidemiology of gonococcal infection. In: Young H, McMillan A, eds. *Immunological diagnosis of sexually transmitted diseases*. New York, Marcel Dekker, 1987:117-65.
- 4 Coghill DV, Young H. The serological classification of *Neisseria gonorrhoeae* with monoclonal antibody coagglutination reagents. *Genitourin Med* 1987;63:225-32.

TO THE EDITOR, *Genitourinary Medicine*

How to maximise a limited chlamydial culture service

Sir,

Many departments of genitourinary medicine (GUM) in the United Kingdom still have only a limited chlamydial culture service, though the need for such a service was documented eight years ago.¹ We think that a complete chlamydial service is essential, but for clinics working within the constraints of a limited service we have tried to define criteria for making optimum use of chlamydial cultures.

A retrospective study in this department during a three month period showed 88 women, two men, and one child with conjunctivitis who all yielded chlamydiae. We

Table 1 Numbers of women with ectopy of 88 yielding chlamydiae (patients) and 10 controls

Reason for attending	Patients:		Controls:	
	No	No with ectopy	No	No with ectopy
Contacts with non-specific urethritis	31	23	18	4
Vaginal discharge	14	6	11	3
Abdominal pain	10	5	6	2
Contacts with gonorrhoea	9	7	1	1
Others	24	12	54	16

looked further at the notes of the women a recorded the presenting symptoms of 88 and of 100 controls who did not yield chlamydiae. Table 1 shows the results, which confirmed the association of a high yield chlamydiae in the presence of ectopy, described by Burns *et al*.²

Table 2 shows the reasons that the patients attended the department. The most common reason for attending was associated with warts, but only two of these patients yielded chlamydiae.

On the basis of these findings we would suggest that priority for testing should be given to women with ectopy who are sexual contacts of men with non-specific urethritis (NSU), women with abdominal pain, sexual contacts of men with gonorrhoea, a women with vaginal discharge. We realise that sexual contacts of men with NSU are usually treated epidemiologically, and using "valuable" chlamydial cultures may therefore be thought to be unnecessary, but defining a high risk group with a high positive yield—namely, women with ectopy who are sexual contacts of men with NSU—these patients can be carefully followed up to ensure microbiological cure. We would also add women patients whose sexual partners

Table 2 Reasons that 88 women yielding chlamydiae attended GUM department

Reason for attending	No (%)
Warts or contact with warts	21 (24)
Contacts with non-specific urethritis	18 (21)
Vaginal discharge	14 (16)
Pruritis vulvae	8 (9)
Abdominal pain	5 (6)
Other	22 (25)

re not traceable, as there is no way of knowing whether they are at risk of carrying *Chlamydiae*. We would furthermore stress the importance of carrying out a "test of cure culture", as in our small series four of these gave positive results.

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References

- Willcox JR, Fisk PG, Barrow J, Barlow D. The need for a chlamydial culture service. *British Journal of Venereal Diseases* 1979;**55**:281-3.
- Burns DCMacD, Darougar S, Thin RN, Lothian L, Nicol CS. Isolation of *Chlamydia* from women attending a clinic for sexually transmitted disease. *British Journal of Venereal Diseases* 1975;**51**:314-8.

TO THE EDITOR, *Genitourinary Medicine*

Rectal isolates of *Neisseria gonorrhoeae* in Perth, Australia

Perth, Western Australia, which has a population of about one million. As part of routine screening for STD, urethral specimens are collected from men and urethral, vaginal, and endocervical specimens are collected from women for gonococcal culture. Rectal specimens are always collected from: men and women who report being the receptive partner in anal intercourse, women who are sexual contacts of men with confirmed gonorrhoea, and women who have gonorrhoea at other sites. Pharyngeal swabs are taken only from patients who engage in anal intercourse.

Sterile 1 µl disposable plastic loops are used to collect material from the urethra, cervix, and rectum (using a proctoscope) for

subsequent staining by Gram's method. Cotton wool swabs from the above sites are collected into Amies's transport medium, stored at room temperature, and plated for culture in less than two hours. Martin-Lewis agar plates (containing vancomycin, anisomycin, and colimycin) and chocolate agar plates are inoculated and incubated in candle extinction jars at 36°C for 48 hours. The identity of all strains is confirmed by a fluorescent antibody technique and by carbohydrate fermentation reactions if strains are from the pharynx or rectum.

The table shows that the total gonococcal isolates from men and women decreased from 1981 to 1986, except in 1983. The total number of rectal isolates from men has consistently decreased since 1982, whereas the decrease in rectal isolates from women did not start until 1986.

Rectal gonorrhoea in men is sexually transmitted, whereas in women it may be caused by direct spread from the genitals to the rectum, penoanal contamination without insertion, or actual anal intercourse.¹ Of the 14 women attending our clinic in 1986 who had rectal gonorrhoea, three had engaged in anal intercourse. Of the four who had rectal gonorrhoea only, one had engaged in anal intercourse. Further studies of the true incidence of receptive anal intercourse in women are necessary.

The reduction in the incidence of rectal isolates from men may indicate changing sexual behaviour patterns in homosexual men. Judson found a 39% decrease in men with gonorrhoea in Denver.² Safer sex guidelines outlined in the national Australian "grim reaper" media campaign and widespread Western Australian state education programmes may have influenced men who engage in receptive anal intercourse. As Osterholm *et al* (unpublished observation) point out, however, we cannot predict the possible reduction in incidence of a sexually transmissible viral infection—such as human immunodeficiency virus—from the reduced incidence of a bacterial sexually transmitted disease.

We thank the STD section of the Health Department of Western Australia for their work, Di Barnett and Ros Duhig for helping to compile the statistics, Marjorie Speelman for typing, and the Commissioner of Health for permission to publish.

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References

- Klein EJ, Fisher LS, Chow AW, *et al*. Anorectal gonococcal infection. *Ann Intern Med* 1977;**86**:340-6.
- Judson FN. Fear of AIDS and gonorrhoea rates in homosexual men. *Lancet* 1983;ii:159-60.

Book review

Understanding human sexuality. 2nd edition. By Janet Shibley Hyde. (Pp 624; £25.80.) New York: McGraw Hill, 1982. (3rd edition already available, price £28.95.)

In the preface the author tells us that the book is aimed primarily at the American undergraduate. There are 23 chapters, many with interesting titles and contents on many aspects of sex and sexuality. The written text is admirably backed up by pleasantly erotic but not distasteful diagrams that I have found useful for demonstrations to patients.

The author does tend to feel she "knows best" about how to handle tricky issues, such as religion, culture, and homosexuality. The discerning reader, however, will overlook this and will also excuse the chapter on sexually transmitted diseases—it is a non-starter! So that we should not become somnolent when reading her book (one is more likely to be sexually aroused!), the author has put "focus" inserts, which give clear case histories, in almost every chapter and has elsewhere given detailed accounts of the lives and work of original thinkers, such as Kinsey and Masters and Johnson.

I recommend that every department of genitourinary medicine should have a copy.

David Goldmeier

Table Yearly incidence of gonorrhoea and rectal gonorrhoea (% of total), 1981-6

Year	Gonococcal isolates from men:			Gonococcal isolates from women:		
	Total	From rectum	From rectum only	Total	From rectum	From rectum only
1981	562	35 (6)	27 (5)	245	8 (3)	0
1982	525	42 (8)	32 (6)	245	20 (8)	6 (3)
1983	586	38 (7)	33 (6)	273	35 (13)	6 (3)
1984	505	21 (4)	18 (4)	209	34 (16)	10 (5)
1985	276	8 (3)	6 (2)	124	37 (30)	3 (2)
1986	263	4 (2)	4 (2)	75	14 (19)	4 (5)